

IN THE CLAIMS:

1. (Currently amended) A method of coordinating magnetic resonance imaging (MRI) comprising:
sensing electromagnetic radiation; and
affirmatively blocking an input signal to blanking one or more components
of an implantable medical device (IMD) during delivery of electromagnetic radiation bursts to a patient, wherein the one or more components comprises an automatic gain controlled amplifier.
2. (Original) The method of claim 1, further comprising blanking components of the IMD during application of gradient magnetic fields during MRI.
3. (Original) The method of claim 1, further comprising receiving a control signal from an MRI device to cause the blanking.
4. (Original) The method of claim 1, further comprising receiving a control signal from a programmer to cause the blanking.
5. (Original) The method of claim 1, further comprising receiving a signal indicating a timing for application of the MRI electromagnetic radiation bursts and blanking the components consistent with the timing.
6. (Original) The method of claim 5, wherein the signal indicating the timing comprises a signal used by the MRI device to define blanking of components of the MRI device.
7. (Original) The method of claim 5, wherein the signal indicating the timing comprises an indication of a start time of one or more of the electromagnetic radiation bursts.

8. (Original) The method of claim 7, wherein the signal indicating the timing comprises an indication of a duration of one or more of the electromagnetic radiation bursts.

9. (Original) The method of claim 1, wherein blanking one or more components of the IMD includes disabling one or more sensing components of the IMD for a period of time and re-enabling the one or more sensing components following the period of time.

10. (Original) The method of claim 9, wherein blanking one or more components of the IMD includes disabling one or more sensing amplifiers of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.

11. (Currently amended) An implantable medical device comprising:
a receiver to receive a signal produced by a magnetic resonance imaging (MRI) system; and
a control unit that in response to the signal, ~~blanks-affirmatively blocks an input signal to~~ one or more components of an implantable medical device (IMD) during application of an MRI electromagnetic radiation burst delivered by said MRI system wherein the one or more components comprises an automatic gain controlled amplifier.

12. (Original) The device of claim 11, wherein the signal indicates a timing for application of one or more electromagnetic radiation bursts.

13. (Original) The device of claim 11, wherein the signal comprises a control signal that causes the control unit to blank the one or more components.

14. (Original) The device of claim 11, wherein the receiver receives the signal from an MRI device.

15. (Original) The device of claim 14, wherein the signal received from the MRI device comprises a signal used by the MRI device to define blanking of components of the MRI device.
16. (Original) The device of claim 11, wherein the receiver receives the signal from a programmer.
17. (Original) The device of claim 11, wherein the signal provides an indication of a start time of the MRI electromagnetic radiation burst.
18. (Original) The device of claim 14, wherein the signal provides an indication of a duration of the MRI electromagnetic radiation burst.
19. (Original) The device of claim 11, wherein the control unit blanks one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and enabling the one or more sensing components following the period of time.
20. (Original) The device of claim 19, wherein the control unit blanks one or more components of the IMD by disabling one or more sensing amplifiers of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.
21. (Original) The device of claim 11, wherein the device is selected from the group consisting of:
an implantable cardiac pacemaker, an implantable defibrillator, an implantable cardioverter, an implantable pacemaker-defibrillator-cardioverter, an implantable sensing device; an implantable monitor; an implantable muscular stimulator; an implantable nerve stimulator; an implantable deep brain stimulator, an implantable gastric stimulator, an implantable colon stimulator, an implantable agent dispenser, and an implantable recorder.

22. (Currently amended) An implantable medical device (IMD) including at least one electrical switch adapted to disable that disables one or more electrical components of the IMD during delivery of MRI electromagnetic radiation bursts to a patient.

23. (Currently amended) A system comprising:

a magnetic resonance imaging (MRI) device including a transmitter to transmit a signal relating to application of an MRI electromagnetic radiation burst from said MRI device; and

an implantable medical device (IMD) including a receiver to receive the signal; and

a control unit to affirmatively block a signal to blank one or more components of the IMD during application of the MRI electromagnetic radiation burst, wherein said one or more components comprises an automatic gain controlled amplifier operatively disposed within said IMD.

24. (Original) The system of claim 23, wherein the receiver receives the signal directly from the MRI device.

25. (Original) The system of claim 23, further comprising a programmer, wherein the MRI device transmits the signal to the programmer, and the receiver of the IMD receives the signal from the programmer.

26. (Original) The system of claim 23, wherein the signal received from the MRI device by the receiver comprises a signal used by the MRI device to define blanking of components of the MRI device.

27. (Original) The system of claim 23, wherein the signal provides an indication of a start time of the MRI electromagnetic radiation burst.

28. (Original) The system of claim 23, wherein the signal provides an indication of a duration of the MRI electromagnetic radiation burst.

29. (Original) The system of claim 23, wherein the control unit blanks one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and enabling the one or more sensing components following the period of time.

30. (Original) The system of claim 29, wherein the control unit blanks one or more components of the IMD by disabling one or more sensing amplifiers of the IMD for a period of time and enabling the one or more sensing amplifiers following the period of time.

31. (Currently amended) A system comprising:

 a programmer to define a timing for application of a magnetic resonance imaging (MRI) electromagnetic radiation burst;

 an MRI device to receive a first signal from the programmer and apply the electromagnetic radiation burst according to the timing; and

 an implantable medical device (IMD) to receive a second signal from the programmer and ~~blank~~affirmatively block a signal directed to one or more components of the IMD during application of the MRI electromagnetic radiation burst, wherein the one or more components comprises at least one automatic gain controlled amplifier disposed within said IMD.

32. (Original) The system of claim 31, wherein the first and second signals comprise an indication of a start time of the MRI electromagnetic radiation burst.

33. (Original) The system of claim 31, wherein the first and second signals comprise an indication of a duration of the MRI electromagnetic radiation burst.

34. (Currently amended) An apparatus comprising:

 means for receiving an indication of a timing of an application of a magnetic resonance imaging (MRI) electromagnetic radiation burst; and

means for ~~blanking affirmatively blocking a signal to one or more~~
components of an IMD during application of the MRI electromagnetic radiation
burst ~~wherein the one or more components comprises at least one automatic~~
~~gain controlled amplifier disposed within said IMD.~~

35. (Original) The apparatus of claim 34, wherein indication of timing
provides an indication of a start time of the MRI electromagnetic radiation burst.

36. (Original) The apparatus of claim 35, wherein indication of timing
provides an indication of a duration of the MRI electromagnetic radiation burst.

37. (Currently amended)An MRI device that sends a signal to an implantable
medical device (IMD) to cause the IMD to blank ~~one or more~~ operable electrical
components coupled to the IMD during application of one or more
electromagnetic radiation bursts by the MRI device, ~~wherein the one or more~~
~~electrical components comprises at least one automatic gain controlled amplifier~~
~~disposed within said IMD.~~

38. (Currently amended)The MRI device of claim 37, wherein the signal sent
by the MRI device comprises a signal used by the MRI device to define blanking
of at least one amplifier component~~[[s]]~~ of the MRI device.